

**Amendments to the Claims**

This listing of claims will replace all prior versions and listings of claims in the application:

**Listing of Claims:**

Claims 1-27 (canceled).

Claim 28 (currently amended): A method for detecting cross-sample contamination in an amplification reaction, said method comprising the steps of:

conducting an amplification reaction in a first nucleic acid sample, using at least one chimeric primer comprising a first portion that hybridizes with at least a portion of a target nucleic acid, the amplification of which is desired, and a second, contamination detection portion that does not hybridize with said target nucleic acid;

conducting a subsequent control amplification reaction in a second nucleic acid sample ~~different from said first nucleic acid sample~~, using at least one primer to amplify specifically said contamination detection portion of said chimeric primer; and

determining whether said second sample has been contaminated by an amplicon from said first sample by determining whether said control reaction produces an amplicon.

Claim 29 (previously presented): The method of claim 28, wherein said second portion is 5' to said first portion in each of said at least one chimeric primers.

Claim 30 (previously presented): The method of claim 28, wherein said at least one primer in said control reaction is not complementary to any contiguous nucleic acid sequence in any target nucleic acid in said second sample.

Claim 31 (previously presented): The method of claim 28, wherein said at least one primer used in said control reaction is substantially complementary to said contamination detection portion.

Claim 32 (previously presented): The method of claim 28, wherein said at least one primer used in said control reaction is substantially identical to said contamination detection portion.

Claim 33 (previously presented): The method of claim 28, wherein at least one of said amplification reactions is selected from the group consisting of PCR, quantitative PCR, and reverse-transcriptase PCR.

Claim 34 (previously presented): The method of claim 28, wherein said samples comprise a heterogeneous population of nucleic acids.

Claim 35 (previously presented): The method of claim 34, wherein said samples comprise a stool sample.

Claim 36 (previously presented): The method of claim 34, wherein said samples comprise a blood sample.

Claim 37 (previously presented): The method of claim 28, wherein said contamination detection portion is about 20 nucleotides.

Claim 38 (previously presented): The method of claim 28, wherein said nucleic acid comprises DNA.

Claim 39 (previously presented): The method of claim 28, wherein said determination step comprises using a sequence-specific nucleic acid probe to capture said amplicon from said first sample.